Package 'avesperu'

April 18, 2025

Title Access to the List of Birds Species of Peru

Version 0.0.5

Description Allows access to the data found in the species list featured in the renowned 'List of the Birds of Peru' Plenge, M. A. (2023) <https://sites.google.com/site/boletinunop/checklist>. This publication stands as one of Peru's most comprehensive reviews of bird diversity. The dataset incorporates detailed species accounts and has been meticulously structured for effortless utilization within the R environment.

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Suggests testthat (>= 3.0.0), xml2

Config/testthat/edition 3

Encoding UTF-8

RoxygenNote 7.3.2

URL https://github.com/PaulESantos/avesperu,
https://paulesantos.github.io/avesperu/

BugReports https://github.com/PaulESantos/avesperu/issues

Depends R (>= 3.5)

LazyData true

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NeedsCompilation no

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Repository CRAN

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Contents

aves_peru_2023   *aves_peru_2023 Dataset*

Description

The aves_peru_2023 dataset comprises a tibble containing information regarding bird species documented in Peru, sourced from the "List of the Birds of Peru" compiled by M. A. Plenge in 2023. It encompasses various details, including scientific names, English names, Spanish names, order, family, and status of each species.

Usage

```
aves_peru_2023
```

Format

A tibble with 1,892 rows and 6 columns:

scientific_name Scientific name of the bird species.

english_name English common name of the bird species.

spanish_name Spanish common name of the bird species.

order The order to which the bird species belongs.

family The family to which the bird species belongs.

status Status of the bird species (e.g., resident, endémic, migratory, etc.).

Details

This dataset is designed to provide users with comprehensive information about the avian species found in Peru, as documented by M. A. Plenge. It is organized for easy access and utilization within the R environment.

Author(s)

Data compilation: M. A. Plenge, Package implementation: Paul Efren Santos Andrade

References

The dataset is based on the "List of the Birds of Peru" by M. A. Plenge.

See Also

For more information about the "avesperu" package and the data sources, visit the package's GitHub repository: https://github.com/PaulESantos/avesperu

Examples

```
# Load the avesperu package
library(avesperu)

# Access the avesperu_tab dataset
data("aves_peru_2023")

# Display the first few rows
head(aves_peru_2023)
```

---

aves_peru_2024   *aves_peru_2024 Dataset*

Description

The aves_peru_2024 dataset contains a tibble that provides information on bird species recorded in Peru, based on the "List of the Birds of Peru" by M. A. Plenge (last updated on March 6, 2024). It includes details such as scientific names, English names, Spanish names, order, family, and status of each species.

Usage

```
aves_peru_2024
```

Format

A tibble with 1,901 rows and 6 columns:

scientific_name Scientific name of the bird species.

english_name English common name of the bird species.

spanish_name Spanish common name of the bird species.

order The order to which the bird species belongs.

family The family to which the bird species belongs.

status Status of the bird species (e.g., resident, endemic, migratory, etc.).

Details

This dataset is designed to provide users with comprehensive information about the avian species found in Peru, as documented by M. A. Plenge. It is organized for easy access and utilization within the R environment.

Author(s)

Data compilation: M. A. Plenge, Package implementation: Paul Efren Santos Andrade

References

The dataset is based on the "List of the Birds of Peru" by M. A. Plenge. The citation for the list is as follows: Plenge, M. A. Version (09-03-2024). List of the birds of Peru / Lista de las aves del Perú. Unión de Ornitólogos del Perú: https://sites.google.com/site/boletinunop/checklist

See Also

For more information about the "avesperu" package and the data sources, visit the package's GitHub repository: https://github.com/PaulESantos/avesperu

Examples

```
# Load the avesperu package
library(avesperu)

# Access the avesperu_tab dataset
data("aves_peru_2024")

# Display the first few rows
head(aves_peru_2024)
```

---

aves_peru_2024_v2   *aves_peru_2024_v2 Dataset*

Description

The aves_peru_2024_v2 dataset provides an updated tibble of bird species recorded in Peru, based on the latest taxonomic revisions by the South American Checklist Committee (SACC).

Usage

```
aves_peru_2024_v2
```

Format

A tibble with 1,909 rows and 6 columns:

order_name Taxonomic order to which the bird species belongs.

family_name Taxonomic family to which the bird species belongs.

scientific_name Scientific name of the bird species.

english_name English common name of the bird species.

spanish_name Spanish common name of the bird species.

status Category indicating the species' status, based on the following codes: X - Resident species. E - Endemic species. NB - Migratory species. V - Vagrant species. IN - Introduced species. EX - Extirpated species. H - Hypothetical species.

Details

This version incorporates significant taxonomic changes, new categories, and updates derived from recent publications, photographs, and sound recordings archived in accredited institutions.

- **Total species**: 1,909
- **Distribution by status**:
  - X: 1,542 species
  - E: 117 species
  - NB: 138 species
  - V: 83 species
  - IN: 3 species
  - EX: 0 species
  - H: 26 species

Species near Peru's borders with Ecuador, Colombia, Brazil, and Chile are included at the end of the list as potential additions to the Peruvian bird inventory. These updates reflect the SACC's ongoing efforts to evaluate and recognize certain subspecies as full species.

Author(s)

Data compilation: Manuel A. Plenge Package implementation: Paul Efren Santos Andrade

References

Plenge, M. A. (2024). Lista de las aves del Perú. Last updated: December 2, 2024. Unión de Ornitólogos del Perú.

See Also

For more information about the taxonomy, visit the South American Checklist Committee (SACC) website: https://sites.google.com/site/boletinunop/checklist

Examples

```
# Load the dataset
data("aves_peru_2024_v2")

# Display the first few rows
head(aves_peru_2024_v2)
```

---

aves_peru_2025_v1   *aves_peru_2025_v1*

Description

The aves_peru_2025_v1 dataset provides an updated tibble of bird species recorded in Peru, based on the latest taxonomic revisions by the South American Checklist Committee (SACC).

Usage

aves_peru_2025_v1

Format

A tibble with 1,911 rows and 6 columns:

order_name Taxonomic order to which the bird species belongs.

family_name Taxonomic family to which the bird species belongs.

scientific_name Scientific name of the bird species.

english_name English common name of the bird species.

spanish_name Spanish common name of the bird species.

status Category indicating the species' status, based on the following codes: X - Resident species. E - Endemic species: A species is considered endemic to Peru until a record outside its borders is published. NB - Non-breeding species: Species that occur regularly in Peru but only during their non-breeding period. V - Vagrant species: Erratic species that occasionally occur in Peru and are not part of the usual avifauna. IN - Introduced species: Species introduced to Peru by humans (or have colonized from introduced populations elsewhere) and have established self-sustaining breeding populations. H - Hypothetical species: Records based only on observations, specimens of dubious origin, unpublished photographs, or recordings kept in private hands. EX - Extinct or extirpated species: Species that have gone extinct or have been extirpated from Peru.

Details

This version incorporates significant taxonomic changes, new categories, and updates derived from recent publications, photographs, and sound recordings archived in accredited institutions. Additionally, a classification criterion has been included, following the SACC guidelines.

- **Total species**: 1,911
- **Distribution by status**:
  - X: 1,542 species
  - E: 118 species
  - NB: 138 species
  - V: 84 species
  - IN: 3 species

– EX: 0 species

– H: 26 species

These updates reflect the SACC's ongoing efforts to evaluate and recognize certain subspecies as full species.

Author(s)

Data compilation: Manuel A. Plenge Package implementation: Paul Efren Santos Andrade

References

Plenge, M. A. (2025). Lista de las aves del Perú. Last updated: February 6, 2025. Unión de Ornitólogos del Perú.

See Also

For more information about the taxonomy, visit the South American Checklist Committee (SACC) website: https://sites.google.com/site/boletinunop/checklist

Examples

```
# Load the dataset
data("aves_peru_2025_v1")

# Display the first few rows
head(aves_peru_2025_v1)
```

---

aves_peru_2025_v2 *aves_peru_2025_v2*

Description

The aves_peru_2025_v2 dataset provides an updated tibble of bird species recorded in Peru, based on the most recent taxonomic revisions by the South American Checklist Committee (SACC).

Usage

```
aves_peru_2025_v2
```

Format

A tibble with 1,912 rows and 6 columns:

order_name Taxonomic order to which the bird species belongs.

family_name Taxonomic family to which the bird species belongs.

scientific_name Scientific name of the bird species.

english_name English common name of the bird species.

spanish_name Spanish common name of the bird species.

status Category indicating the species' status, based on the following codes:

- `X`: Resident species.
- `E`: Endemic species. A species is considered endemic to Peru until a record outside its borders is published.
- `NB`: Non-breeding (migratory) species. Species that occur regularly in Peru but only during their non-breeding period.
- `V`: Vagrant species. Species that occasionally occur in Peru but are not part of the usual avifauna.
- `IN`: Introduced species. Species introduced to Peru by humans (or have colonized from introduced populations elsewhere) and have established self-sustaining breeding populations.
- `H`: Hypothetical species. Records based only on observations, specimens of dubious origin, or unpublished photographs or recordings kept in private hands.
- `EX`: Extinct or extirpated species. Species that have gone extinct or have been extirpated from Peru.

Details

This version reflects dramatic taxonomic changes and category updates based on published articles, photographs, and sound recordings archived in accredited institutions. It also includes a classification criterion following the SACC guidelines. Species without a specific code are considered resident species, equivalent to the "X" category of the SACC.

- **Total species**: 1,912
- **Distribution by status**:
    - `X`: 1,542 species
    - `E`: 119 species
    - `NB`: 138 species
    - `V`: 84 species
    - `IN`: 3 species
    - `EX`: 0 species
    - `H`: 26 species

These updates reflect the SACC's continuous evaluation process, which now recognizes several former subspecies as full species.

Author(s)

Data compilation: Manuel A. Plenge Package implementation: Paul Efren Santos Andrade

References

Plenge, M. A. Version (05-04-2025) List of the birds of Peru / Lista de las aves del Perú. Unión de Ornitólogos del Perú: https://sites.google.com/site/boletinunop/checklist

See Also

For more information about the data, visit: https://sites.google.com/site/boletinunop/checklist

Examples

```
# Load the dataset
data("aves_peru_2025_v2")
```

---

search_avesperu   *Search for Bird Species Data in the Birds of Peru Dataset*

Description

This function searches for bird species information in the dataset provided by the avesperu package, given a list of species names. It supports approximate (fuzzy) matching to handle typographical errors or minor variations in the species names. The function returns detailed information for each species, including taxonomic data, common names, and status.

Usage

```
search_avesperu(splist, max_distance = 0.1)
```

Arguments

splist   A character vector containing the names of bird species to search for. Names can include minor variations or typos.

max_distance   Numeric. The maximum allowable distance for fuzzy matching, which can either be a proportion (0 < max_distance < 1) or an integer representing the maximum number of allowed differences. Defaults to 0.1.

Details

The function performs the following steps:

1. Validates the input, ensuring that splist is a character vector or a factor.

2. Standardizes species names and identifies duplicate entries in the list.

3. For each unique species name, it searches for matches in the dataset using approximate string matching (agrep), with a customizable max_distance.

4. Retrieves the taxonomic and common name data for the closest matching species.

If no matches are found for a species, the corresponding row in the output will contain NA values.

Value

A data frame with the following columns:

name_submitted The species name provided as input.

accepted_name The closest matching species name from the dataset, or NA if no match is found.

order_name The taxonomic order of the species.

family_name The taxonomic family of the species.

english_name The common name of the species in English.

spanish_name The common name of the species in Spanish.

status The conservation or other status of the species.

dist The computed distance between the submitted name and the matched name.

Examples

```
# Example: Search for bird species in the dataset
splist <- c("Falco sparverius", "Tinamus osgodi", "Crypturellus soui",
            "Thraupis palmarum", "Thamnophilus praecox")
search_avesperu(splist)
```

---

show_progress	*Determine whether to show progress bar Return logical TRUE/FALSE depending on options and interactive session*

Description

Determine whether to show progress bar Return logical TRUE/FALSE depending on options and interactive session

Usage

```
show_progress()
```

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